

The background of the entire page is a faded, blue-tinted photograph of several children. In the upper left, three children are standing together; one is holding a soccer ball. In the lower right, a close-up of a young boy's face is visible, smiling. The text is overlaid on the right side of the image.

Court Automation and the Missouri Juvenile Justice System: An Evaluation

April 2003

Submitted to the Office of State Courts Administrator
Prepared by: Jeanie Thies, Project Evaluator

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The level of automation and information-sharing available in Missouri juvenile and family courts today would not have been accomplished without the leadership and dedicated efforts of U.S. Senator Christopher S. "Kit" Bond. We appreciate and acknowledge his efforts in making these projects a reality. We also would like to thank Mary Beth Dobbs former State Director to Senator Bond, for her thoughtfulness and encouragement, and for understanding the value of court automation and information-sharing to Missouri's children, families, and communities. A special thank you to the Supreme Court, and in particular those judges who served as Chief Justice since 1998, for their continued support.

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I. EXECUTIVE SUMMARY

In July of 1997, the Missouri Office of State Courts Administrator (OSCA) initiated a comprehensive juvenile court automation and integrated information-sharing project throughout the state. This project, the first of its kind in the nation, can potentially serve as a demonstration project for juvenile justice systems across the country.

This is an Executive Summary of project accomplishments to date and findings of an evaluation that was conducted between May and November of 2002. A full report of evaluation findings has also been provided to the Office of State Courts Administrator.

Project Overview

The scope of this multi-stage project is very ambitious. The final result will be an integrated information-sharing network and automated case-management system that can help juvenile justice professionals in Missouri better serve youth and their families. Anticipated long-term impacts are improved quality of case management and service delivery in child abuse/neglect and delinquency cases, and ultimately, enhanced public safety.

There are several interrelated components to the statewide automation project:

- **Infrastructure and Communication** – The hardware and a common communication infrastructure links juvenile and family court personnel in Missouri's 45 judicial circuits and permits inter-circuit, intra-circuit, and inter-agency communication in a secure, efficient, and timely manner. The infrastructure also provides the foundation

for development of the other system components.

- **Juvenile Tracking Referral Assessment and Classification (J-TRAC)** – Automates the state's structured decision-making tool, the Missouri Juvenile Offender Risk and Needs Assessment and Classification System, which is used to determine dispositions, sanctions, and services for court-referred youth.
- **Justice Information System (JIS)** – The juvenile justice component of JIS provides a juvenile case management system, which will interface with the adult court's case management system to track referral history, services, and sanctions statewide.
- **Missouri Juvenile Justice Information System (MOJJIS)** – Links the juvenile and family courts to collaborative executive agencies that serve youth. Provides a common yet secure communication network across which these agencies can share pertinent information.

Methodology

This evaluation was modeled after other evaluations of court automation projects, in that it focuses on identifying process goals, observable and perceived short-term impact, and does not attempt to measure actual impact on clients served, delinquent behavior, and public safety. Nevertheless, it is important to establish some indicators of performance success as the project advances. In order to increase buy-in and secure sufficient funding for long-term support, it is essential to demonstrate that the short-term benefits do

translate into some positive changes for juveniles and families served and benefits to community safety. Some long-term performance indicators are suggested in the full evaluation report.

Multiple methods were used: a survey, semi-structured interviews, focus groups, and document review. Data were primarily qualitative and descriptive, but some quantitative data were collected as well. These quantitative data relate to frequency with which various components of automation were used, and ratings that survey respondents could assign to some items on the survey. The methods and sources for obtaining data are described below.

Project History and Progress

In July 1997, the Juvenile and Family Court Case Management Task Team (JFCCMTT) was created by the Missouri Court Automation Committee. The JFCCMTT was charged with two primary tasks: (1) to define the functional requirements necessary for a statewide automated juvenile case management and information system; and (2) to decide on a solution strategy. This group chose the juvenile case management system, now termed the Justice Information System (JIS). The Task Team has continued to meet on an as-needed basis.

In September 1998, OSCA spearheaded the formation of the Missouri Juvenile Justice Information System Task Team in response to Section 210.865 RSMo. This statute authorized the Office of State Courts Administrator and the Departments of Social Services, Elementary and Secondary Education, Health, and Mental Health to coordinate information systems to promote better information-sharing and tracking of children who come in contact with or are

provided services by these agencies and the juvenile divisions of the circuit courts. The MOJJIS Task Team had the overall responsibility for developing and implementing this system. However, in early stages, this group became mired in confidentiality issues related to the participating agencies' ability to place information into the MOJJIS system. Team representatives did not have the authority to commit their agency to providing the information in all cases. The MOJJIS Task Team agreed that a statutory addition was needed to tighten the confidentiality requirement of information-sharing. In addition, the Judicial Department had been leading this project; however, all of the departments, as well as the judiciary, had to have an equal share in the project's success.

Hence, the Juvenile Information Governance Commission was created in 2001 as a result of the passage of House Bill 236 and changes were made to confidentiality. The Commission is now the governing body of the MOJJIS and is charged with authorizing categories and types of information that will be shared between the executive agencies and the juvenile and family courts. The Commission provides the vision, strategy, and policy authority. The Commission is comprised of heads of executive agencies, representatives from OSCA, and a judge and juvenile officer (JO) from both a circuit in a first-class county and a multi-county circuit.

Through the efforts of U.S. Senator Christopher Bond, the Community Oriented Policing Services (COPS) office within the Department of Justice and the Office of Juvenile Justice and Delinquency Prevention have provided the bulk of funding for this project. This included a Juvenile Accountability Incentive Block Grant that was obtained through the Missouri Department of Public Safety in 2001 and

2002, that provided significant resources to these endeavors and allowed OSCA to move forward with juvenile and family court automation, state agency secure connectivity, and information-sharing.

Change through Automation

The components of this project that have been introduced thus far have brought some dramatic changes to how juvenile offices do business. Juvenile justice professionals that completed the survey were asked to assess the overall impact that automation has had on their work *thus far*. Fifty-seven percent described the impact as “Significantly positive, while another 20% saw it as “Moderately positive.” Six percent reported “No noticeable impact.” It is noteworthy that *none* of the survey respondents rated the impact as “Moderately negative” or “Significantly Negative.”¹

One court administrator emphasized the role automation has played in bringing Missouri’s juvenile offices into a single, comprehensive juvenile justice system, rather than 45 relatively independent and sometimes isolated entities. Among the other positive changes noted were (a) increased efficiency/productivity, (b) substantial time and some cost-savings through the availability of secure e-mail, (c) improved methods for gathering information and for conducting research (via the Internet), and (d) increased access to pertinent information regarding a juvenile’s involvement with other agencies and parent’s involvement with the authorities. Another advantage cited by many users is the enhanced ability to communicate with their counterparts in other circuits regarding particular case information and general issues relevant to their profession.

¹ Seventeen percent of survey respondents did not provide a rating on this item.

While computerization and information integration involves substantial one-time costs — particularly in its earliest stages — over the long term, there are substantial savings that offset these costs. Some savings already realized and reported by juvenile officers (JO) include cost savings are also seen in telephone bills, postage, mileage, and even personnel. For example, one JO reported that if her circuit did not have the ability to file forms on-line and make rapid queries of other circuits, they would have to request at least two more additional clerical staff².

Some personnel discussed a downside to automation. There are costs for items such as printer ink, special desks or chairs, and keyboard rests. However, some of these added costs are one-shot costs or are infrequent purchases, while savings are often long-term. Others spoke of the need to “double-task” – keeping both paper and automated records. Still others noted problems with productivity lost though excessive use of e-mail and the Internet for personal reasons.

One court administrator, who acknowledged that automation has been and can continue to be tremendously beneficial to juvenile justice in Missouri, cautioned there is a danger of “overloading staff with information” that may have little real value. He added that while OSCA has promoted a number of potential applications for data that will become increasingly available, many of these may be more theoretical than practical. He stressed that it is important to promote realistic expectations about what automation and information systems can offer.

Administrators and managers pointed out there are new tasks associated with having greater computer access and automation. New

² However, no circuit reported lay-offs as a result of computerization/automation.

policies/protocols/operating procedures must be established, such as policies and protocols for management of automated records, governing access to the Internet and special applications, and for when abuse of Internet or e-mail is detected.

One survey respondent noted that while automation has reduced certain workloads, it has not brought about lay-offs or the need to phase out positions. Rather, it has freed up staff to perform more essential tasks.

Across all data sources, far more positive feedback than negative feedback was provided during this evaluation. Some sources provided uniformly positive feedback, seeing no drawbacks to automation, while all sources that presented negative feedback tempered this with some comments regarding the benefits of automation and with optimism that some problems will be satisfactorily resolved over time.

Some users commented that automation has been so beneficial they did not know how they conducted daily business before it was introduced. They observed that automation was long overdue and that Missouri's juvenile justice system had lagged well behind the "technological curve," and for too long had failed to take advantages of computerization. One survey respondent pointed out that computer literacy is typically not included as a qualification for hiring staff in most positions at their office. As computers become increasingly essential to the work of juvenile justice professionals, this will become a necessary qualification.

Benefits multiply over time. The longer juvenile justice professionals were involved with automation/information integration, the more essential they saw it to their jobs and the more aware they have become of the various capabilities available to them. One survey

respondent who has been in the field for 21 years, and who described computers as initially "intimidating" went on to say "I can't imagine doing my job without one."

Key Findings and Recommendations

This section summarizes the key findings from the evaluation and presents recommendations for maximizing benefits and minimizing unintended negative consequences over time.

Key Findings

- Effective case-management and sound decision-making in juvenile justice are increasingly dependent on computers, particularly on: a) automated systems that help structure decision-making; b) sophisticated databases that increase access to vital information; and c) communication networks that promote information integration and data-sharing among key agencies and organizations in a secure environment.
- The types of automation and technological changes OSCA has introduced to juvenile courts in Missouri have had immediate and multiple benefits, and are perceived as having potential to produce long-term positive change in how the juvenile justice system conducts business and administers services. Benefits are on-going and tend to multiply over time as staff become more familiar with new systems, adept at solving problems, and cognizant of advantages.
- The ability to evaluate the effectiveness of sanctions and services and to determine "what works" with court-referred juveniles and families

in Missouri can potentially be significantly enhanced with the advent of a single, comprehensive database that tracks services youth receive statewide.

- The most pronounced benefit observed to date concerns the increased access to computers and the ability to communicate electronically with other juvenile offices and collaborative agencies in a secure environment, resulting in more timely information exchange and more efficient day-to-day business operations
- Despite the immediate benefits, introduction of new technology and automated systems can involve a steep learning curve and may initially increase staff workloads. Staff need to have realistic expectations regarding initial challenges and setbacks, and regarding the limits of technology
- New phases of automation and technological change need to be introduced gradually and pilot-tested on sites that voluntarily agree to participate. Pilot site staff need to have a forum for sharing and solving problems, as well as success stories. Success stories need to be communicated to future implementation sites in order to 'sell' staff on benefits and reduce apprehension and resistance.
- Staff at juvenile justice and collaborative agencies need clear guidelines regarding the purposes for information-sharing, and the specific types of information to be shared across agencies, if they are to develop trust in the system and to take full

advantage of the benefits of integrated information-sharing.

- Administrative, managerial, and ideally, judicial support is crucial in shaping staff's response to technology-related changes. The degree of success experienced among the different circuits through the introduction of computers and automation is closely related to the level of administrative, managerial, and judicial support. At those circuits at which judges and juvenile officers enthusiastically and optimistically welcomed automation, promoted its benefits, and encouraged staff to use new technology routinely, staff were more satisfied with the results of automation, more likely to accept initial setbacks, and more optimistic about its long-term potential in helping them do their jobs better. Administrators, manager and judges who are willing to invest the time to become computer-savvy and weather the early stages of change can foster positive attitudes and acceptance of change in staff, and ultimately will realize greater benefits of automation.
- Juvenile justice personnel have widely varied levels of knowledge about and comfort with computers and automation, and specific job duties. Training needs be flexible, on-going, customized to the needs of individuals and to different circuits, and offered immediately before or just after new applications become available.

Recommendations

- **Secure “buy-in” from administrative and managerial levels and the judiciary before phasing in new components.**

Administrators and managers are the most critical elements in creating a supportive atmosphere for introducing new levels of automation and committing to the long-range process.

- **Examine lessons learned from JIS adult system & apply to implementation of juvenile system.**

Feedback on how the adult component of JIS is utilized, on problems reported and solutions to these should be monitored regularly and applied to the juvenile component. Key informants in this study reported some difficulties with adult JIS that they are concerned will also appear in the juvenile component. Satisfaction with the system is likely to be greater when users understand the rationale for some parts of the system they may regard as problematic and limits of databases and automation.

- **Ensure quality control.** Confidence in the system will be heightened when there are uniform measures in place to provide reasonable assurance that data will be entered in a timely way, entered accurately, and sensitive data will be safeguarded appropriately at all participating circuits. Some measures need to be adopted for routinely monitoring data entry and ensuring quality control.
- **Clear policies and agreement.** Stakeholders’ concerns about MOJJIS will be lessened and support strengthened if there are clear, detailed policies and inter-agency agreements

regarding what types of data can be shared and who can access different types of data, and when all users are thoroughly trained on these. For both JIS and MOJJIS, stakeholders need assurance of clear policies for how long data will remain in the system and how records for juveniles who pass their 17th birthday will be terminated.

- **Review current training curricula and method of delivery.** Missouri juvenile justice professionals have busy schedules and varied needs for training. It is recommended that OSCA explore ways to make training as flexible and as customized to users’ needs as possible. Further, it is important that the training be offered in a timely way so that new skills are not lost if there are delays before these can be put to use.
- **Promote automation as an evaluation tool.** Provide training, assistance or other necessary support to allow circuits to conduct evaluation using the data that will be stored in the statewide database. Administrators are interested in learning how the databases can be used to generate aggregate data from their circuit, and function as an aid in evaluating trends and determining “what works.” However, they recognize this will require special training, resources, or direct assistance from OSCA and are unsure whether they will receive the support to do this.

This evaluation focused on the short-term changes automation has produced. By and large, the impact has been positive. Further, stakeholders perceive automation as having potential to make an increasingly stronger positive impact on juvenile justice operations

in Missouri over time. As the level and scope of automation expands, more benefits can be realized. Costs, too, will increase, as may the potential for unplanned negative consequences. It is critical to continue monitoring the impact and gather data on long-term indicators of success. While it may not be feasible to gather these data across all circuits, some of these changes can be examined on a limited basis at pilot sites as the JIS and MOJJIS components move forward.

Conclusion

Automation and integrated information-sharing can ultimately produce a wide range

of benefits to juvenile and family courts and other youth-service agencies. Despite the responsibilities with which juvenile justice agencies are charged and their impact on communities, like other public agencies, they have lagged far behind the private sector in technological advances. The integration of computers, automation, and information-sharing networks into the work of Missouri's juvenile justice system has produced promising results. By continuing to increase efficiency of court operations, strengthening case-management practices, and promoting cross-system collaboration and information-sharing, juvenile justice personnel can make more equitable and sound decisions, thus building public confidence in the courts and juvenile justice system.

II. INTRODUCTION

In July of 1997, the Missouri Office of State Courts Administrator (OSCA) initiated a comprehensive juvenile court automation and integrated information-sharing project throughout the state. This project, the first of its kind in the nation, can potentially serve as a demonstration project for juvenile justice systems across the country.

This report describes the project accomplishments to date and findings of an evaluation that was conducted between May and November of 2002. Section II of the report gives a very broad overview of the project's key components, discusses the purpose of the evaluation, and briefly summarizes the key findings. Section III explains the study methodology. Section IV reviews the history of the project and status of technology and automation prior to the inception of the project. Section V covers the findings in depth, addressing each core component separately. Section VI synthesizes the findings and presents some recommendations for ongoing implementation.

Project Overview

The scope of this multi-stage project is very ambitious. The final result will be an integrated information-sharing network and automated case-management system that can help juvenile justice professionals in Missouri better serve youth and their families. Anticipated long-term impacts are improved quality of case management and service delivery in child abuse/ neglect cases and delinquency cases, and ultimately, enhanced public safety.

There are several interrelated components to the statewide automation project:

- **Infrastructure and Communication –** The hardware and a common communication infrastructure link juvenile and family court personnel in Missouri's 45 judicial circuits and permit inter-circuit, intra-circuit, and inter-agency communication in a secure, efficient, and timely manner. The infrastructure also provides the foundation for development of the other system components.
- **Juvenile Tracking Referral Assessment and Classification (J-TRAC) –** Automates the state's structured decision-making tool, the Missouri Juvenile Offender Risk and Needs Assessment and Classification System, which is used to determine dispositions, sanctions, and services for court-referred youth.
- **Justice Information System (JIS) –** The juvenile justice component of JIS provides a juvenile case management system, which will interface with the adult court case management system to track referral history, services, and sanctions statewide.
- **Missouri Juvenile Justice Information System (MOJJIS) –** Links the juvenile and family courts to collaborative executive agencies that serve youth. Provides a common yet secure communication network across which these agencies can share pertinent information.

Purpose of Evaluation

The evaluation of this project was undertaken in order to:

- contrast the current state of technology and automaton in the family and juvenile courts with the status before this project was introduced;
- examine the implementation process and key features that have contributed to successful implementation;
- identify the benefits that automation has brought to the Missouri juvenile justice system;
- identify unintended negative consequences of automation and barriers to successful implementation; and
- examine responses to negative consequences and to barriers.

This report describes the findings in regard to each of the above objectives, and includes recommendations that can:

- strengthen and facilitate ongoing implementation and planning;
- minimize unintended consequences automation and integrated information-sharing systems; and
- maximize the long- and short-term benefits of automation and integrated information-sharing systems.

Key Findings

The following points constitute the major findings of the evaluation:

- Effective case-management and sound decision-making in juvenile justice are increasingly dependent on computer access, cross-circuit databases, and integrated information-sharing systems.
- The types of automation and technological changes OSCA has introduced to juvenile courts in Missouri have had immediate and multiple benefits, and are perceived as having potential to produce long-term positive changes in how the juvenile justice system conducts business and administers services.
- A single, comprehensive database that tracks services youth receive statewide, such as the MOJJIS database, can potentially bring dramatic improvements to the current state of knowledge on “what works” in Missouri juvenile justice.
- The most pronounced benefit observed to date is a more expedient and efficient means of communication through electronic communication.
- New technology and automated systems can involve steep learning curves and may initially increase staff workloads.
- New phases of automation and technological change need to be introduced gradually and pilot-tested on sites that voluntarily agree to participate.
- Staff at juvenile justice and collaborative agencies need clear guidelines regarding the purposes for information-sharing, and the specific types of information to be shared.

- Administrative, managerial, and judicial support is crucial in shaping staff's response to technology-related changes.
- Training needs be flexible, on-going, customized to the needs of individuals and to different circuits, and offered immediately before or just after new applications become available.

A more complete discussion of these findings and the implications for ongoing implementation are presented in the remainder of this report.

III. METHODOLOGY

Previous efforts to evaluate impact of automation in other jurisdictions have uncovered a number of short-term benefits, such as reduced paperwork, improved communication/collaboration, and increased efficiency. Yet the full impact of automation on courts and juvenile justice systems is difficult to measure. Ideally, these short-term benefits described are means to other ends. Presumably, if juvenile justice agencies operate more efficiently and have stronger intra-agency and inter-agency collaboration (with other agencies that serve youth), they can ensure timely provision of needed services, strengthen families, and reduce risk for delinquent behavior. Such long-term benefits are not readily observable, however, or are not fully realized until several years after automation and technological changes are introduced. Moreover, there are a number of influences that affect outcomes of interest that cannot be controlled for evaluation purposes.

This evaluation was modeled after other evaluations of court automation projects, in that it focuses on identifying process goals, observable and perceived short-term impact, and does not attempt to measure actual impact on clients served, delinquent behavior, and public safety. Nevertheless, it is important to establish some long-range indicators of performance success as the project advances. In order to increase buy-in and secure sufficient funding for long-term support, it is essential to demonstrate that the short-term benefits do translate into some positive changes for juveniles and families served and benefits to community safety. Some long-term performance indicators are suggested in Section VI of this report.

This evaluation was conducted using multiple methods. These included a survey, semi-structured interviews, focus groups, and document review. Data were primarily qualitative and descriptive, but some quantitative data were collected as well. These quantitative data relate to frequency with which various components of automation were used, and ratings that survey respondents assigned to some items on the survey. The methods and sources for obtaining data are described below.

Methods and Data Sources

▪ Surveys

A survey was sent out via electronic mail to all juvenile justice staff at Missouri's 45 judicial circuits using the OSCA central directory. This included all Juvenile Officers (JOs) and Deputy Juvenile Offices (DJOs), as well as some clerical, detention, program, and other support staff (depending on whether persons in these positions have an OSCA e-mail address). A cover letter was attached explaining the purpose of the survey. Simple instructions were included for completing it and returning it to OSCA on line. Completion of the survey was voluntary, but an additional letter was sent to the JOs asking that they encourage their staff to participate. Contact information for the evaluator and a Court Specialist at OSCA was given if staff had questions or were unsuccessful in opening the survey (which was an e-mail attachment), or in sending it back.

The survey included both open-ended and fixed-choice questions. The following areas were addressed in the survey: how various components of the automation project are used and perceived, frequency of use,

perceived advantages and drawbacks, training needs, problems, concerns, and anticipated concerns and benefits regarding components not yet fully implemented.

The first 207 completed surveys received comprise the evaluation sample. Table 1 gives the breakdown of respondents by position and circuit. The surveys received constitute a fairly representative sample of the circuits, with 40 of the 45 (89%) of the circuits included in the sample. The survey instrument and the full results are presented in Appendices D and E, respectively.

▪ Interviews

Interview participants were selected so as to obtain a representative sampling of stakeholders and system users who had varied experiences with automation, held various jobs, and were in various roles in relation to the project. Those interviewed included only juvenile/family court personnel, a judge at a multi-county circuit, OSCA staff, the Division of Family Services (DFS) Management and Analyst Specialist, the Division of Youth Services (DYS) Data Processing Coordinator, the Missouri Juvenile Justice Association Director, and two administrators from schools are involved in one of the pilot projects. Several of those interviewed had been involved in various phases of court automation, and were knowledgeable about long-term project plans and goals. Participants from the juvenile offices were selected from single county, multi-county, urban and rural circuits, and circuits that had experienced implementation of different project components.

The interviews were semi-structured. Questions were open-ended, with opportunity for the interviewee to expand on any topic or offer additional comments or suggestions. Interviews included more detailed probe questions than did the surveys.

Table 1: Survey Respondents by Position

Job Title	% of Respondents
Juvenile Officer	17%
Deputy Juvenile Officer	39%
Detention Staff	2%
Clerical	13%
Other	25%

(4% did not provide job title)

Due to the time constraints under which this evaluation was conducted, and the geographic dispersal of the circuits and other agencies/schools involved, most interviews were conducted by telephone. The interview protocol varied slightly across participants, but a general protocol is included in Appendix A. The complete interview list may be found in Appendix B. Unless indicated that a telephone interview was done, the interview was conducted in person.

▪ Focus Groups

Focus groups were conducted with personnel at both the 22nd Circuit in St. Louis City and the 37th Circuit in West Plains. The 22nd Circuit is a single-county circuit in an urban area, whereas the 37th Circuit is a rural, multi-county circuit that is the pilot site for JIS. The focus groups addressed many of the same issues covered in interviews and survey. Focus groups, though, are more dynamic than surveys and interviews, and tend to produce different types of data. Ideas are stimulated through participants hearing one another's perspectives and having the opportunity to consider and respond to one another's input. Participants were asked to discuss their experiences with automation, identify problems or challenges they may have encountered, and offer suggestions for improving the utility and impact of computers

and automation on the juvenile justice system. Participation was voluntary. Participants included DJOs, a grants coordinator, and a Chief Deputy Juvenile Officer. Participant's level of previous computer experience varied, as did their current computer needs. Appendix C contains the Focus Group Protocol.

▪ **Document and Literature Review**

OSCA provided various materials for review during the evaluation. These related to background development and ongoing implementation of this project. They were reviewed and analyzed in order to provide a framework for understanding the project. These included documents describing the structure, duties, and activities of the Juvenile Information Governance Commission and the Missouri Juvenile Justice Information System Task Team; a report describing the iNotes Communication Pilot Project; the Classifications Risk and Needs Reports produced by OSCA for the J-TRAC pilot sites; communications from OSCA and the Missouri Supreme Court describing the project and requesting legislative support and

funding; the grant application to the Community Oriented Policing Office requesting project funds; and press releases and newspaper articles covering various aspects of the project.

In addition, reports and articles produced by the Office of Juvenile Justice and Delinquency Prevention and the Bureau of Justice Assistance that pertained to court automation project and development of integrated information systems were reviewed. These materials contained recommended guidelines for implementing automated information-sharing systems, and discussed evaluations of similar projects. A portion of one of these publications highlighted the MOJJIS component of this project.

Discussion of the various components and relevant findings are collectively drawn from all of the data sources used, unless a particular source is specified.

IV. BACKGROUND

Project History and Progress

In July 1997, the Juvenile and Family Court Case Management Task Team (JFCCMTT) was created by the Missouri Court Automation Committee. The JFCCMTT was charged with two primary tasks: (1) to define the functional requirements necessary for a statewide automated juvenile case management and information system; and (2) to decide on a solution strategy. This group chose the juvenile case management system, now termed the Justice Information System (JIS). The Task Team has continued to meet on an as-needed basis.

In September 1998, OSCA spearheaded the formation of the Missouri Juvenile Justice Information System Task Team in response to Section 210.865 RSMo. This statute authorized the Office of State Courts Administrator and the Departments of Social Services, Elementary and Secondary Education, Health, and Mental Health to coordinate information systems to promote better information-sharing and tracking of children who come in contact with or are provided services by these agencies and the juvenile divisions of the circuit courts. The MOJJIS Task Team had the overall responsibility for developing and implementing this system. However, in early stages, this group became mired in confidentiality issues related to the participating agencies' ability to place information into the MOJJIS system. Team representatives did not have the authority to commit their agency to providing the information in all cases. The MOJJIS Task Team agreed that a statutory addition was needed to tighten the confidentiality requirement of information-sharing. In addition, the Judicial Department had been

leading this project; however, all of the departments, as well as the judiciary, had to have an equal share in the project's success.

Hence, the Juvenile Information Governance Commission was created in 2001 as a result of the passage of House Bill 236 and changes were made to confidentiality. The Commission is now the governing body of the MOJJIS and is charged with authorizing categories and types of information that will be shared between the executive agencies and the juvenile and family courts. The Commission provides the vision, strategy, and policy authority. The Commission is comprised of heads of executive agencies, representatives from OSCA, and a judge and a JO from both a circuit in a first-class county and a multi-county circuit.

Through the efforts of U.S. Senator Christopher Bond, the Community Oriented Policing Services (COPS) office within the Department of Justice and the Office of Juvenile Justice and Delinquency Prevention have provided the bulk of funding for this project. This included a Juvenile Accountability Incentive Block Grant that was obtained through the Missouri Department of Public Safety in 2001 and 2002, that provided significant resources to these endeavors and allowed OSCA to move forward with juvenile and family court automation, state agency secure connectivity, and information-sharing.

There was tremendous variation in the level of access to computers and automation that pre-existed this project. Previously, some access and some level of automation was available at most circuits. Typically though, this was very limited. At rural juvenile offices, for instance, JO and one clerical

person were often the only staff with a computer. Most of these offices had no Internet access and no ability to use e-mail. Even in larger, first class counties, DJOs and other staff had very limited access. Some staff, but not all, at the larger metro circuits had e-mail. The use of computer word-processors was limited and, therefore, officers often had to work after hours and weekends to prepare reports and other legal memoranda. There were no means to electronically send and file petitions or other forms of an urgent nature. At multi-county sites, staff had to travel long distances—in some communities, over 100 miles—to obtain judges' signatures or file petitions. In these rural multi-county circuits, where many officers work in geographically dispersed satellite facilities, inter-circuit communication was especially fragmented and described as "hit or miss."

The first step in increasing inter-agency collaboration and information-sharing has been to connect the juvenile offices with one another and with the key executive youth service agencies and public schools on a secure communication network. All juvenile and family court offices are now aligned with computer infrastructure and software configurations necessary for electronic information-sharing through a secure Statewide Judicial Information Network (SJIN). A Wide Area Network (WAN) links the 45 circuits in Missouri's 114 counties and the City of St. Louis to one another. The circuit juvenile offices and family court offices have also been provided with hardware, that included enough personal computers to ensure that all 1,400 plus users across the state have their own terminals. Furthermore, in order to ensure secure communication, state agencies are part of the same Wide Area Network. This allows all state agencies and judicial personnel to electronically communicate in a secure environment. In addition, OSCA used grant

funds to purchase many workstations and servers for DFS and DYS.

These steps have set the stage for the full implementation of the MOJJIS network. While enhanced computer and e-mail access has facilitated this process, full implementation of the MOJJIS system will give juvenile justice professionals access to comprehensive information on youth's involvement with other agencies and organizations in a matter of minutes.

Historically, juvenile and family court personnel have been unable to obtain information from other agencies, including referral histories from other circuit juvenile offices, without making 44 independent telephone contacts with each of the other circuits. Juvenile justice professionals carry large caseloads and are not able to spare large amounts of time making multiple and repeated telephone calls to obtain information about youth-history. Gathering information on the status of a juvenile from other circuits and youth-serving agencies has not routinely been done. When it is done without a database, it is an arduous and time-consuming task. Thus, there has been no systematic way for court history to follow a juvenile across circuit and county boundaries. Consequently, without a database critical information about a juvenile's referral and court history is unavailable. Without this history, it is difficult to fully assess the level of risk a youth presents to a community or the level of danger an abused or neglected child might be in.

The juvenile case management system of JIS that has been developed, built, and tested, and is now being piloted (as of June 2002) at the 37th Circuit, will be the first central repository for information on youth referred to Missouri's juvenile courts. JIS involves a single database that includes referral, social,

and court information on all youth referred to Missouri's juvenile and family courts. The juvenile case management system also interfaces with the adult JIS database, enabling court users to obtain records on parents of court-referred youth and information on Orders of Protection involving parents and guardians. The user can electronically search and determine if any member of the child's immediate or extended family have other court cases pending that can be then assigned to one judge. This is an excellent case management tool for unified family courts.

The juvenile justice system has not had a means for analyzing trends in how sanctions, services, and programs are meted out. In addition, there have been no means to evaluate outcomes across different judicial circuits. The state of Missouri has not had the means to gather aggregate data from a single database in order to examine trends in referrals. Without a statewide database, it is impossible to determine which sanctions and services are most effective in reducing repeat offenders. The introduction of the JIS statewide database will make available a wealth of aggregate data for purposes of analysis, comparison, and evaluation.

The Juvenile Tracking Referral Assessment and Classification (J-TRAC) system, that is being used by nine different judicial circuits, has demonstrated some of the advantages of automated data collection. Those sites that have been participating in J-TRAC (which will ultimately be replaced with a similar program within the JIS database) are provided reports with profiles of youth, including risk and needs data, and service and sanction decisions. Prior to the introduction of J-TRAC, circuits interested in this type of information would have to gather data manually and find their own resources for

analyzing it. Despite its value, this type of analysis was rarely done.

OSCA has recognized that acceptance from judges, JOs, DJOs, secretaries, and staff at other collaborative agencies is critical to the success of this project. There have been on going opportunities to gather feedback and ideas from court professional at key decision points throughout the project. The input, particularly in regard to the functional requirements of the system, has guided the design of specific components. It is critical that the users see and understand the functionality of the business requirements that were defined. Their input and feedback is invaluable and must be done before the application is built. On-going efforts are made to solicit feedback, track problems, and respond promptly as new components are phased in.

Change through Automation

The components of this project that have been introduced have brought some dramatic changes to how juvenile offices do business. Juvenile justice professionals that completed the survey were asked to assess the overall impact that automation has had on their work thus far. Fifty-seven percent described the impact as "Significantly positive, while another 20% saw it as "Moderately positive." Six percent reported "No noticeable impact." It is noteworthy that none of the survey respondents rated the impact as "Moderately negative" or "Significantly Negative."³

One court administrator emphasized the role automation has played and will continue to play in bringing Missouri's juvenile offices into a single, comprehensive juvenile justice system, rather than 45 relatively independent

³ Seventeen percent of survey respondents did not provide a rating on this item.

and sometimes isolated entities. Among the other positive changes noted were (a) increased efficiency/productivity, (b) substantial time and some cost-savings through the availability of e-mail, (c) improved methods for gathering information and for conducting research (using the Internet), and (d) greater and more rapid success to pertinent information regarding a juvenile's involvement with other agencies and parent's involvement with the authorities. Another advantage cited by many system users was the enhanced ability to communicate with their counterparts in other circuits regarding case information and general issues relevant to their profession.

While computerization and information integration involve substantial one-time costs—particularly in its earliest stages—over the long term, there are also substantial savings that offset these costs. Some savings already realized that were reported by administrators and managers include cost savings in telephone bills, postage, mileage, and even personnel. For example, one JO reported that if her circuit did not have the ability to file forms on-line and make rapid queries of other circuits, they would have to request at least two more additional clerical staff⁴.

Some personnel discussed a downside to automation. There are costs for items such as printer ink, special desks or chairs, and keyboard rests. However, some of these added costs are one-shot costs or are infrequent purchases, while savings are often long-term. Others spoke of the need to “double-task”—keeping both paper and automated records. Still others noted problems with productivity lost through excessive use of e-mail and the Internet for personal reasons.

⁴ However, no circuit reported lay-offs as a result of computerization/automation.

One court administrator, who acknowledged that automation has been and can continue to be tremendously beneficial to juvenile justice in Missouri, cautioned there is a danger of “overloading staff with information” that may have little real value. He added that while OSCA has promoted a number of potential applications for data that will become increasingly available, many of these may be more theoretical than practical. He stressed that it is important to promote realistic expectations about what automation and information systems can offer.

Administrators and managers pointed out there are new tasks associated with having increased computer access and automation. New policies/protocols/operating procedures must be established, such as policies and protocols for management of automated records, governing access to the Internet and special applications, and for when abuse of Internet or e-mail is detected.

Across all data sources, far more positive feedback than negative feedback was provided during this evaluation. Some sources provided uniformly positive feedback, seeing no drawbacks to automation, while all sources that presented negative feedback tempered this with some comments regarding the benefits of automation and with optimism that problems will be satisfactorily resolved over time. One survey respondent noted that while automation has reduced certain workloads, it has not brought about lay-offs or the need to phase out positions. Rather, it has freed up staff to perform more essential tasks. One survey respondent pointed out that computer literacy is typically not included as a qualification for hiring staff in most positions at their office. As computers become increasingly essential to the work of juvenile justice professionals, this will become a necessary qualification.

Some users commented that automation has been so beneficial they did not know how they conducted daily business before it was introduced. They observed that automation was long overdue and that Missouri's juvenile justice system had lagged well behind the "technological curve" and, for too long had failed to take advantages of computerization.

There is evidence that benefits multiply over time. The longer juvenile justice professionals had been involved with automation/information integration, the more

essential they saw it to their jobs and the more aware they had become of the various capabilities available to them. One survey respondent who has been in the field for 21 years, and who described computers as initially "intimidating" went on to say "I can't imagine doing my job without one."

The following section examines the impact of automation in greater detail, and considers how long-range benefits may be maximized.

V. EVALUATION FINDINGS

This project is unique in that it involves several components across multiple sites, and will continue to unfold over a number of years. Some goals will still not be fully realized for several years. This section will discuss the findings in regard to those areas that are fully implemented, experiences of pilot sites with partially implemented components, lessons learned, and expectations regarding the long-term impact of automation and integrated information-sharing.

Automation has gradually been phased-in in juvenile offices across the state. Each component is introduced and implemented somewhat differently, depending on the objectives of that particular component, level of interest among circuits, and the scope of the particular component. For instance JIS, which is perhaps the most ambitious piece in the overall automation project, is initially being piloted at only one site, the 37th Circuit. This is a smaller, multi-county circuit in a rural part of the state that has volunteered to serve as the pilot site.

The pilot phase provides valuable information on system utility, barriers to implementation, training needs, and both positive and negative unintended consequences. OSCA has worked closely with the pilot sites to identify and resolve problems at the earliest possible juncture. Lessons learned are documented and applied as a given component is implemented at other circuits.

While the different components of automation are interrelated, and in some ways, interdependent, each has a distinct purpose and distinct implementation phases. They have produced varying results and reactions from users. Findings in regard to the four

components are presented separately. However, in some parts of the discussion, the connection between components is evident.

Computer Access, Infrastructure, and Communication

■ General Computer Access, Training and Support

The crux of the automation project is the development of a statewide juvenile justice database system. However, in order to realize this goal, OSCA first needed to ensure juvenile justice professionals had access to computers. In addition, they had to provide the necessary infrastructure for a communication network, offer support in the form of general maintenance and troubleshooting, and ensure all personnel were adequately trained on the use of personal computers, software, and databases.

The installation of computer workstations on every JO's and DJO's desk has been a boon to juvenile offices, especially in the rural circuits. Computer access has affected virtually every task in which they engage. For instance, they are now able to compose social histories and other reports using the word-processing program Word. Reports are much more timely and clerical staff are freed from the responsibility of doing reports for all staff. Staff can more easily type notes and other documents that typically were kept in handwritten form, resulting in a more professional presentation of documents, and reducing misinterpretation that may occur when reading handwritten materials. Clerical and other staff have found a variety of ways to use the spreadsheet program available to them. Uses include creation of "mini-databases" to organize data from individual

caseloads, and management of restitution accounts.

Through OSCA, 50 downloadable templates of commonly used forms and reports are available on-line. This helps ensure there is some uniform protocol for court and juvenile justice transactions carried out by the different circuits across the state. When OSCA updates a new form, the revised version becomes available to the circuits instantaneously. One administrator pointed out that this has virtually eliminated the task of continually updating hard copy forms manuals.

OSCA has provided basic and advanced training on general computer use and on J-TRAC and JIS at these pilot sites. Generally, the training is perceived as adequate and convenient. Seventy-five percent of survey respondents said that the training they have received has met their needs. Only 8% disagreed that it had (the remaining 17% did not respond to this item). Seventy-two percent said that both the time when and the place where training was held were convenient; 8% said the time was but not the place; 1% said place was convenient, but not time (with 19% not responding to this item).

One of the problems cited with training was that it is sometimes given too far in advance of the implementation of a given component. By the time staff had access to the program or system on which they were trained, they had forgotten important information. Another problem, cited by supervisors, is the time lost when personnel attend training. Other staff complained that training was too basic or general, whereas others felt they wasted time in some segments of training classes that did not directly relate to their job. The latter point was made in regard to the JIS training. The training on JIS was described as fairly

overwhelming, and all parts were not seen as applicable to all staff.

Support provided by OSCA for problems was described as adequate. When survey respondents were asked about resources they used when they encountered problems, 69% reported they relied on OSCA, 56% said they turned to personnel at their own office, whereas 13% used written materials they had received from OSCA⁵. Several sources reported that the OSCA Help Desk was very useful. There were some in resolving problems in the project's earlier stages. For instance, staff reported getting frequently routed from one person to another when they called the Help Desk. However, they added that this process has become more expedient.

The main reasons assistance is sought are when computers "lock up" or "crash" completely. However, most users who described these problems seemed to accept this as an inevitable part of computerization, and did not think the breakdowns occur more frequently than in other workplaces of the 21st century. Not unexpectedly, the biggest complaint was the time lost when this occurs. No sources expressed a concern with losing data and it appears that the back-up systems currently in place are adequate.

At some circuits, there is a preference for using on-site staff to solve problems as much as possible. This does not necessarily mean each office needs a full-time computer/automation expert on-site. At most sites an in-house expert has informally emerged, someone with considerable computer expertise. Over time, when all circuits are fully automated, it will be increasingly difficult for OSCA to maintain all system support statewide. It may be

⁵ These were not mutually exclusive responses; in other words, subject could check two or more responses if they chose.

beneficial to offer an advanced level of training for staff designated as the expert for an office, circuit, or even region, and to explore ways to allow this staff person to devote some percentage of their work time to providing computer assistance.

▪ **Lotus Notes/Electronic Mail**

Every JO in the 45 judicial circuits was enabled with Lotus-Notes e-mail capabilities through OSCA as part of the Statewide Judicial Information Network as of July of 1998. Overall, there JOs, DJOs, juvenile and family court attorneys, detention aides, grant employees, therapists, psychologists, teachers, and records clerks.

Juvenile justice personnel report that having a common infrastructure for secure, on-line communication has brought numerous benefits—saving their circuits time and money, increasing efficiency and productivity, strengthening intra-circuit, inter-circuit and inter-agency collaborations, expediting day-to-day tasks, and eliminating some redundant services. OSCA has provided all JOs and DJOs with a complete directory of e-mail addresses for all Missouri juvenile court personnel, as well as addresses for DFS staff. Prior to the introduction of Lotus Notes, many circuits—particularly the rural ones—did not have access to even “ordinary” e-mail.

While ordinary e-mail capabilities also permits efficient on-line communication, it is important to note that Lotus Notes offers a secure environment in which to transmit sensitive, confidential information about court-served juveniles and their families.

Using the Lotus Notes application, a single e-mail query can now be sent out to other circuits, ensuring that court personnel has valuable information regarding past court involvement, including prior certification.

While such queries are not standard in every case, in those cases in which a youth does have a history of mobility, a JO or DJO can now send an e-mail query to multiple circuits—to all 44 other circuits if necessary—within minutes. Response time is far quicker than can be achieved using post mail.

Because DFS is also linked to the Lotus Notes system, staff can make rapid, confidential inquiries regarding services received through DFS. DFS also benefits from having prompt access to important data regarding referral history and can track services provided by the courts. Some juvenile office staff and DFS caseworkers rely on the system on a daily basis to communicate information about youth being served by the court and DFS. Because it is quicker than regular e-mail and produces its own record of communication (unlike telephone communication), they feel they can do a better job of “staying on top” of cases this way.

The ability to make one-shot information requests, send urgent communications to judges, supervisors, and staff members instantaneously, and complete filings and obtain signatures on-line frees up time that DJOs can devote to their most important duties—interacting with clients and supervising youth in the field. Electronic communication also provides juvenile justice professionals, school personnel, and personnel from other youth-serving agencies with ready access to information to support crucial decisions that affect public safety and the lives of youth in our communities. One source stated that the enhanced communication “helps us to make the most informed and appropriate decisions in the best interest of the youth and families we work with.”

Additional uses of Lotus Notes identified by users are receiving guidance from supervisors (at multi-county circuits where the supervisor is at only one site), and conducting staffings without typing up telephone lines. Yet another important advantage of e-mail is that it creates instant documentation of important communications, eliminating the need to log such communications separately and reducing the possibility of miscommunication. Many users also believe that e-mail dramatically reduces paperwork, through eliminating much paper communication such as intra-office memoranda, and because some documents can simply be stored electronically.

Finally, access to a statewide communication system is crucial when staff need to find

detention bedspace quickly. Not all circuits have detention facilities, and officers often must locate a detention bed as soon as possible for youth that present a significant risk to the community. With a secure electronic communication system, it is no longer necessary to make multiple phone calls to determine bed availability. A single electronic query can be sent to all circuits with detention facilities much more expediently than through multiple phone contacts.

As shown in Tables 2 and 3⁶, survey data revealed that e-mail is used frequently and is regarded as a valuable tool.

TABLE 2: Advantages of Electronic Mail

Access to e-mail	Strongly Agree	Agree	Disagree	Strongly Disagree
Permits quicker access to needed information about juveniles with whom I work	59%	16%	0	2%
Facilitates intra-circuit communication	63%	32%	0	1%
Facilitates communication with other circuits	52%	31%	3%	0
Facilitates inter-agency communication (DFS, DMH, other)	41%	37%	9%	5%

TABLE 3: Frequency of E-mail Contact With Other Agencies/Organizations

CONTACT	2-3 times weekly	Weekly	Less than once a week	Rarely	Not at all
Other Mo. Juvenile Offices	26%	14%	21%	20%	11%
Division of Family Services	23%	13%	10%	21%	5%
Schools	3%	9%	10%	24%	43%
Placement facilities	1%	4%	14%	23%	50%
Department of Mental Health	1%	2%	7%	24%	6%

⁶ Percentages may not equal 100% due to rounding and subjects not responding to every item.

The majority of e-mail communication occurs between various offices within the multi-county circuits, with other circuits, and with DFS. Although more than one-third of survey respondents reported communicating with DFS on at least a weekly basis, many respondents also commented that their local DFS office either was not on Lotus Notes, did not have e-mail, or did not respond to e-mail inquiries. It appears that there is much variability across the different DFS offices regarding Lotus Notes and e-mail access or expectations for checking messages.

Communication with other agencies—particularly agencies on Lotus Notes where there is some concern about security—is less routine. Nevertheless, some users do regularly exchange e-mail with staff at DMH, schools, and placement facilities.

Lotus Notes is used to send the on-line template forms and reports. This is reported to have resulted in significant time savings and some cost savings. In some multi-county circuits, staff previously had to drive to the county seat to obtain a judge's signature—which could be as much as 100 miles round trip. Now, with e-mail, they have the ability to send forms to judges who can then sign them electronically and return immediately. Forty-five percent of the survey respondents viewed the ability to access and electronically transmit forms on line as "Very useful," 18% regarded it as "Moderately useful;" and only 14% thought they were "Not useful"(with a 23% no response rate on this item.)

Some users identified problems with Lotus Notes and e-mail in general. When the system is down, JOs, DJOs and judges are, temporarily at least, unable to access communications that are stored electronically, unless they printed a copy (which they often do not do in order to save paper.) Many staff

would like better software to block the "spam" (junk e-mail) that takes time to delete and may stall the system. A few persons indicated that they felt the availability of e-mail has resulted in people communicating and expecting immediate responses on very minor matters about which they previously would not have communicated. One supervisor reported that if he reviewed and responded to every e-mail he received daily, he would spend the better part of his day doing so.

OSCA has also created a Discussion Database for the JOs and other court administrators within the Lotus Notes application. They can raise issues for consideration and discussion, ask questions and solicit one another's input on important matters. Thirty-seven percent of the JOs surveyed reported using the Discussion Database routinely. Two other databases are available, the MCIC (Missouri Court Information Center) and Missouri Court Opinion databases. Though neither are used by many of the survey respondents, some (23 and 34%, respectively) rely on these for information at least occasionally.

▪ **iNotes Communication Pilot Project**

The Safe Schools Act mandates that Missouri's JOs report certain types of information regarding court-referred juveniles to schools. However, individual schools are not on the WAN. The iNotes Communication Pilot Project was developed as a test project for linking schools directly to area juvenile and family court offices. The project is presently underway with the five school districts in Callaway County and the 13th Judicial Circuit. As of February 2002, a secure communication network links the juvenile office to multiple schools in the school districts (including the Missouri School for the Deaf). The intent is that, through providing a simple and efficient

method for communication, school-court collaboration will improve and compliance with the Safe Schools Act will increase.

Key informants at two of the schools and a DJO Supervisor at the 13th Circuit spoke enthusiastically about their experiences with the iNotes pilot. One school administrator described the project as a “win-win” collaboration. Because officers have a convenient and expedient way to contact the school, school personnel feel their input is more valued. Juvenile office staff can more readily learn about school misbehavior of youth under supervision, gather better data for risk assessment, and find out about services provided through the school. Administrators, teachers and counselors are armed with information about a youth’s court involvement that can have implications on school safety.

Results from a survey administered independent of this evaluation on a small sample (n=15), and feedback presented at a follow-up meeting conducted by OSCA staff, indicate the system is being used to communicate about a variety of issues. These include concerns about school safety in regard to specific juveniles, truancy and tardiness notices, admissions to placement/treatment facilities, referrals, incident reports, protective custody issues, and reports on youth in detention. Among the benefits cited were “no or decreased phone tag,” “more secure transmission of information,” “documentation,” “reduced paperwork,” “transmission of information via standardized forms,” increased level of contact [between juvenile offices and] elementary schools,” and “the ability to transmit information to multiple users at the same time.”

There were some problems noted, but these were minor. Most concerned frustration with temporary network slowdowns/breakdowns.

Also, one user pointed out that while the communication system offers “great potential,” it will take time for all staff to be fully versed in its use and willing to “do their part,” by routinely checking e-mail and responding to requests for information.

▪ Internet Access

OSCA has provided all circuits with Internet access since this project began. Before this, very few juvenile justice personnel could access the Internet. Survey respondents were effusive in their comments regarding its utility. One DJO stated it has “endless benefits.” Table 4 presents the survey findings in regard to how juvenile justice personnel use the Internet.

Additional topics which users have researched on the Internet are the effects of new drugs that are popular with youth, medical and mental health problems, and programs and interventions in other states. Also, workers often use it to map directions to clients’ houses or service facilities and to make travel arrangements when attending training workshops and professional conferences.

TABLE 4: Internet Advantages

Reasons Used	Percent of Users
To research juvenile justice issues	8%
Research grants of funding for new programs/services	12%
Learn about best practices with juveniles and families	43%
Find community services, programs and placement facilities	37%

Internet access allows officers to get into the case.net database, the Missouri State Courts Automated Case Management System. The Case.net database permits inquiries on case records that are public information, including docket entries, parties, judgement and charges in Missouri courts that are on the adult component of JIS. JOs and DJOs can learn about parents' pending cases and gather information is pertinent to risk assessment and placement decisions.

Some concerns were raised in regard to Internet abuse. Yet it also appears that as the novelty wears off, abuse declines. While some supervisors would like training on how to monitor Internet use, few considered this a major problem. Some circuits have opted to grant access to selected staff, or to limit it to just one computer in the office that everyone can use. The rationale for determining who gets access does not always appear to be made clear, as several survey respondents stated they would like access and were unsure why other staff have it and they do not.

OSCA does not set policy regarding Internet use across the circuits. However, it may be helpful for OSCA to provide a forum for JOs to communicate about practices in their offices in regard to who gets access, how use can be monitored, and action taken when abuse is detected.

▪ **Juvenile Tracking Referral and Assessment and Classification**

In April of 1999, OSCA developed a software product that automates the state's risk assessment and classification system. This product, the Juvenile Tracking Referral Assessment and Classification, known as J-TRAC, collects and stores demographic, referral, assessment, classification, and disposition information on juvenile offenders.

House Bill 174 mandated that juvenile courts begin conducting standardized risk assessments. OSCA, through the Risk Assessment Committee, developed the Missouri Case Classification System, which was introduced in 1997. While a standardized assessment and classification system can bring many benefits, one concern that arose during the pilot phase was that the system would add to staff workloads. The J-TRAC system directly addresses this concern through automation of the case classification process. Using J-TRAC, the DJOs are able to complete the risk and needs assessment on the computer in slightly less time than it takes to do so manually. These assessments are then automatically linked to recommended case dispositions and services that must be considered for the youth. Certification and other important historical variables are also entered on the J-TRAC system.

Six circuits (10th, 11th, 12th, 19th, 20th, and 22nd) were selected as the first pilot sites and began using the J-TRAC software in July of 1999. In September 2000, three more circuits (14th, 41st, and 45th) were added to the study and trained on J-TRAC. OSCA continues to work closely with these sites to improve and refine the automated case classification process.

Seventeen percent of J-TRAC users who completed the survey described the program as "Very user-friendly", while 58% thought it "Moderately user-friendly." Twenty percent said it was "Moderately difficult to use." Only 3% consider it "Very difficult to use."

J-TRAC users have experienced some problems using the system, with 40% of the J-TRAC sample of survey respondents indicating that they had "persistent problems" with J-TRAC. Most of these concerned the speed of the system (which several indicated has improved over time), or the inability to

move rapidly from one youth's file to the next. Others had problems with what they saw as the program's tendency to "lock up" and cause them to re-enter data. It should be noted though, that some of these problems may have to do with a problem with a particular computer (rather than the J-TRAC program). Problems may also be due to user error. Users also reported that OSCA staff has been responsive to their concerns.

Survey respondents identified several purposes and advantages of J-TRAC, as presented in Table 5.

J-TRAC produces reports which include aggregate information of the risk and needs of youth at each participating circuit. These reports are developed by OSCA and provided to the participating circuit. One very important function of the reports is that they provide ongoing feedback on scale validity, thus promoting users' confidence in the classification system. This kind of affirmation builds support among staff for the risk assessment and classification system, provides JOs and judges with important information regarding trends in referral and sanction patterns, how services are used, and allows for cross-site comparison of such trends.

Further, aggregate risk and needs data that is linked to disposition and intervention information can be used for evaluation purposes. Information regarding outcomes for different types of youth who receive various sanctions and are served through the courts, DYS, and other agency's programs, can be used as a tool to determine what works in managing delinquent youth.

JOs reported using aggregate reports to justify requests for new services and programs, provide statistics in grant proposals, and help plan how services will be eliminated or

TABLE 5: J-TRAC Advantages & Uses

Advantage/Use	% of Users ⁷
Facilitates more uniform decision-making	50%
Minimizes errors in risk & needs assessment and classification	41%
Creates aggregate data reports that can assist in resource allocation and planning	50%
Helps ensure that risk and needs assessments are completed in a timely manner	7%

distributed in the future. Supervisors also find the program useful in monitoring whether staff are completing risk and needs assessments as they should.

The utility of these reports is not limited to the local/state level. OSCA sends the J-TRAC reports to the National Center for Juvenile Justice for use in monitoring national trends and informing public policy recommendations.

▪ **Justice Information System**

Once fully implemented, Missouri will have the most comprehensive judicial case management system in the nation. The Justice Information System provides a common database for circuit courts in Missouri. The juvenile arm of JIS is a statewide repository for storing information on court-referred

⁷ n=59. This is based on only the sample of survey respondents who were familiar enough with J-TRAC to respond to this section.

juveniles that allows tracking of youth across circuit/jurisdictional boundaries within the state.

JIS will store information on certifications, outstanding orders of judicial custody, social problems, risk levels, and programs and services. The ability to obtain this information expediently from other circuits can have important implications for quality care of youth and public safety. For instance, if a juvenile is certified as an adult in another circuit and this information is not available, a JO may unwittingly fail to comply with a state statute requiring that juvenile be transferred to the adult criminal justice system if re-arrested. A single query on JIS will provide certification history.

As previously indicated, the juvenile component of JIS has been introduced at a single pilot site, the 37th Circuit (Carter, Howell, Oregon, and Shannon Counties). The next waves of implementation will take place over the following year. These dates have been targeted for implementation at other circuits: 34th and 42nd Circuits, October 2002; 6th Circuit, January 2003; 8th, 14th, and 15th Circuits, February – March 2003; 1st, 3rd, and 9th Circuits, April – May 2003; and the 45th and 28th Circuits, June - July 2003.

Staff at the 37th Circuit were interviewed regarding their experiences with JIS. At the time of these interviews the database had been in use for less than six months. They described the learning curve as “fairly steep.” Managers believe that once initial problems are solved, it will likely require several months before all users are proficient on the system.

When the interviews were being conducted, OSCA staff had already spent several weeks on site working closely with the staff to resolve problems. Also, staff have devised

some of their own solutions. For instance, some considered the menu system cumbersome and difficult to navigate. A primary reason was that the screens did not have user-friendly, easily recognizable names (Such as “Offense History”). However, they learned they could create a menu for their own office, renaming screens if needed. Also, a supervisor found the JIS Manual provided by OSCA to be too complex and overwhelming for day-to-day use. Much of the information it contains is superfluous for their purposes. She has since begun developing their own in-house JIS instruction manual for everyday use.

Concerns raised at the pilot site can be collapsed into two areas:

- a.) Training – The three-week training class was perceived as too long for many users, in that it included parts that should not have been required by all staff. Training needs to be tailored to more closely match specific jobs.
- b.) Excess workload – Staff has not yet gained the necessary confidence in the system to feel they could let go of their old system. As a result, they continue to “double-task” on most duties that they hope will eventually be completely automated. For instance, they are still tallying and reporting DYS statistics using a spreadsheet, though they have been told that this can be extracted from JIS. However, they had not yet received training or other assistance on how to do this. Also, they are still maintaining fairly extensive paper files.

JIS had strong support from the administrative and supervisory staff at the pilot site, which has greatly facilitated the adjustment process. The staff at this small circuit had entered into the pilot project

prepared to embark on a new learning experience and to deal with setbacks. Virtually all persons who spoke about JIS felt confident that in the long run, the benefits brought by JIS would make the experience worthwhile. As the juvenile component of JIS expands to other sites, it is crucial that OSCA continue to solicit feedback from the 37th Circuit and respond to their concerns.

Juvenile justice personnel that do not work at the pilot site but are familiar with plans to introduce the juvenile JIS component also raised some concerns. One involves the system for assigning numbers to clients. As in the adult system, there appears to be the potential for dual or multiple number assignments (the same individual being assigned the same number), creating confusion, and at worst, inappropriate case handling decisions.

A greater concern exists at those circuits that have considerable investments and tremendous amounts of data stored in their own databases specific to their circuits. The new software will not be capable of interfacing with these systems and transferring data. Thus, these circuits are grappling with how to maintain these data. Case-by-case data entry tasks will consume significant time and resources. Thirty-one percent of survey respondents cited “loss of data in legacy databases” as a concern when JIS becomes fully implemented. It is expected that OSCA will provide some resources to assist with the transition process, but the extent to which these will be available is not yet determined. Every effort should be made to assist circuits in securing resources to ease the transition process and minimize data loss. Without such support, resistance among some circuits is likely to impede full implementation of JIS.

Experiences with the JIS adult database can also provide some valuable lessons for implementation of the juvenile system. Limited information is available for this report regarding problems and benefits of the adult system, as this was not the focus of the evaluation. However, some interview sources suggested that it is likely the two systems will have parallel problems.

Moreover, some means of quality control must be established to ensure necessary data get entered and these are accurate and up-to-date. As some sources pointed out, the utility of this type of database is strongly contingent on the competence and thoroughness of its users. One stakeholder emphasized that a database is “only as good as the entry people make it.”

The need for some standardized quality control provided by a central oversight agency, such as OSCA, must be balanced against the circuits’ needs to establish some independence in how use of the system is monitored and managed. Yet, key informant data suggest that while there is an expectation that OSCA will offer ongoing guidance and technical assistance throughout implementation of JIS, it is preferred that OSCA’s role is “more supportive” and “less directive.”

As with any technology that requires considerable changes in how business is done, trade-offs are inevitable. However, it is important to ensure that the trade-offs are seen as worthwhile—that the benefits of the common database exceed the losses and disadvantages. Given the potential for improved information-sharing and convenience with the new database, the benefits are likely to far outweigh the disadvantages.

Table 6 presents results from the survey concerning anticipated benefits of the statewide juvenile database.

TABLE 6: Anticipated Benefits of Statewide Database

Benefits	% of Users
Access to more complete and accurate referral history	83%
Improved case decision-making	71%
Improved case management	65%
Access to information on parents' court involvement	74%
More uniform decision-making in regard to sanctions and services provided	49%
More timely access to case information	72%
Less paperwork/paper waste	49%
Improved public safety	40%

▪ **Missouri Juvenile Justice Information System**

The Missouri Juvenile Justice Information System, known as MOJJIS, is being developed by OSCA in collaboration with key youth-serving executive branch agencies—DFS, DYS, DMH, the Department of Health and Senior Services, and the Department of Elementary and Secondary Education. MOJJIS will establish a common interface among these agencies, integrating key pieces of data from youth records from these agencies into a single database through which agency personnel can make queries on a need-to-know basis. Thus, this component

moves beyond JIS, which contains data from the courts only. The system will include built-in safeguards to protect sensitive, confidential data.

The MOJJIS component represents the most advanced and sophisticated piece of the Juvenile Court Automation Project. This component is yet in the early stages, though the groundwork has been laid. Phase I, which has been underway, begins building the collaborative framework among the partner agencies. It involves identification of the designated contact at the partner agencies, preparation of Memoranda of Understanding, and bridging agencies' e-mail into a secure system. Also, during this phase, the product application was built and is being tested by OSCA. Currently, piloting is planned at some sites that will also be piloting JIS—the 37th, 42nd, 34th, and possibly the 6th Circuit.

DJOs can create more effective and comprehensive service delivery plans if they have full knowledge of a youth's needs and deficits, and can track services the youth received or is currently receiving through other agencies, such as DFS, DYS, and DMH. Through MOJJIS, professionals who serve youth and their families can track services received across other agencies. This will include, for example, information regarding diagnoses, the risk a youth presents to the community, some family history, and failures and successes with different services offered. This information has tremendous implications in assessment of youth, types of intervention that are appropriate, and sanction decisions. Without ready access to this information, service delivery can be fragmented, redundant, and inadequate.

The examples of cross-agency communication discussed earlier that involve DFS and the Callaway County schools illustrate how a relatively simple means of

automated information-sharing can have positive effects. These do not reflect the full capabilities of a single database to which all participating organizations will submit and extract important information. Yet the enthusiasm with which the Lotus Notes and iNotes communication components have been received underscores the need for more sophisticated, convenient, and expedient ways to obtain and share case information and to link youth to needed services.

At the time this evaluation was conducted, most juvenile justice professionals in the field have very little knowledge about what the final MOJJIS “product” will look like and its impact on their work. Among those who are familiar with it, there appears to be a good deal of apprehension regarding precisely what types of data will be stored on the network and who will have access—not merely which executive agencies, but which staff at these agencies—and, finally, how confidentiality will be safeguarded. However, those persons interviewed who have been actively involved in the planning stages are optimistic that these issues will be resolved satisfactorily.

As this component of the project advances, it will become increasingly important to keep those circuits and personnel that have not been active in the planning states fully informed of how the MOJJIS system will unfold. Some of the apprehension that stakeholders had in earlier stages has diminished as plans become more concrete over time. For instance, a MOJJIS Task Team member indicated that initially, some participating agencies had “grave concerns” regarding confidentiality and security of information shared. However, these are receiving close attention from OSCA and many of the concerns are alleviated. Nevertheless, as MOJJIS moves closer to full implementation, it is likely that new concerns will surface among other system users.

Evaluations of automation and integrated information-sharing in other jurisdictions indicate that resolution of the following is critical to the success of MOJJIS:

- a.) The lead agency must work with partner agencies in developing *explicit* parameters as to the types of information that executive agencies will be responsible for entering in the network;
- b.) Clear agreements must be established regarding intellectual property rights of products and applications created exclusively for this project, as well regarding “ownership” of data;
- c.) Clear lines of authority for database management and responsibility for upgrades and maintenance must be established; and
- d.) Policies/protocols need to thoroughly and explicitly address issues of confidentiality and security of system data.

A concern raised by a court administrator in regard to “information overload” was noted earlier in this report. Comprehensive database systems have myriad advantages, but the types of information that will be gathered, stored, and shared need to be selected judiciously with close consideration as to purpose. More information is not inherently better information. It is important to maintain perspective on the limits of what integrated information-sharing systems can offer and focus on collecting and sharing those types of data that can clearly aid juvenile justice and other youth-serving professionals in doing their jobs better.

Finally, it is critical that the necessary funding and resources be acquired to support and sustain this project into the future. Long-term funding to maintain and upgrade computers and software programs remains a significant concern among administrators and supervisors. All agencies that stand to gain from access to an integrated information-sharing network must work closely together to acquire and leverage needed resources.

Juvenile justice professionals carry large caseloads, have scarce resources, and operate within short decision-making time frames.

Yet their decisions can have a major impact on youth's lives and the safety of the community at large. It is paramount that they have the ability to obtain comprehensive information about their clients and share this with relevant parties. Clearly, the MOJJIS component of this project is addressing a significant unmet need in the Missouri juvenile justice system and has the potential to have a tremendous impact on multi-agency collaboration, decision-making and service planning

VI. KEY FINDINGS AND RECOMMENDATIONS

Key findings from this evaluation were presented in the Introduction of this report. In this section, these are reiterated and elaborated upon. Recommendations for strengthening support for the Juvenile Court Automation Project and for maximizing benefits are presented and discussed also.

Key Findings

- Effective case-management and sound decision-making in juvenile justice are increasingly dependent on computers, particularly on: a) automated systems that help structure decision-making; b) sophisticated databases that increase access to vital information; and c) communication networks that promote information integration and data-sharing among key agencies and organizations in a secure environment.
- The types of automation and technological changes OSCA has introduced to juvenile courts in Missouri have had immediate and multiple benefits, and are perceived as having potential to produce long-term positive change in how the juvenile justice system conducts business and administers services. Benefits are on-going and tend to multiply over time as staff become more familiar with new systems, adept at solving problems, and cognizant of advantages.
- The ability to evaluate the effectiveness of sanctions and services and to determine “what works” with court-referred juveniles and families in Missouri can potentially be significantly enhanced with the advent of a single, comprehensive database that tracks services youth receive statewide.
- The most pronounced benefit observed to date concerns the increased access to computers and the ability to communicate electronically with other juvenile offices and collaborative agencies in a secure environment, resulting in more timely information exchange and more efficient day-to-day business operations.
- Despite the immediate benefits, introduction of new technology and automated systems can involve a steep learning curve and may initially increase staff workloads. Staff need to have realistic expectations regarding initial challenges and setbacks, and regarding the limits of technology.
- New phases of automation and technological change need to be introduced gradually and pilot-tested on sites that voluntarily agree to participate. Pilot site staff need to have a forum for sharing and solving problems, as well as success stories. Success stories need to be communicated to future implementation sites in order to ‘sell’ staff on benefits and reduce apprehension and resistance.
- Staff at juvenile justice and collaborative agencies need clear guidelines regarding the purposes for information-sharing, and the specific types of information to be shared across agencies, if they are to develop trust in the system and to take full advantage of the benefits of integrated information-sharing.
- Administrative, managerial, and judicial support is crucial in shaping staff’s response to technology-related changes. The degree of success experienced among the different circuits through the

introduction of computers and automation is closely related to the level of administrative/managerial/judicial support. At those circuits at which judges and JOs enthusiastically and optimistically welcomed automation, promoted its benefits, and encouraged staff to use new technology routinely, staff were more satisfied with the results of automation, more likely to accept initial setbacks, and more optimistic about its long-term potential in helping them do their jobs better. Administrators, manager and judges who are willing to invest the time to become computer-savvy and weather the early stages of change can foster positive attitudes and acceptance of change in staff, and ultimately will realize greater benefits of automation.

- Juvenile justice personnel have widely varied levels of knowledge about and comfort with computers and automation, and specific job duties. Training needs be flexible, on-going, customized to the needs of individuals and to different circuits, and offered immediately before or just after new applications become available.

Recommendations

- **Secure “buy-in” from administrative and managerial levels and the judiciary before phasing in new components.** Administrators and managers are the most critical elements in creating a supportive atmosphere for introducing new levels of automation and committing to the long-range process.
- **Examine lessons learned from JIS adult system & apply to implementation of juvenile system.** Feedback on how the adult component of JIS is utilized, on problems reported and solutions to these

should be monitored regularly and applied to the juvenile component. Key informants in this study reported some difficulties with adult JIS that they are concerned will also appear in the juvenile component. Satisfaction with the system is likely to be greater when users understand the rationale for some parts of the system they may regard as problematic and limits of databases and automation.

- **Ensure quality control.** Confidence in the system will be heightened when there are uniform measures in place to provide reasonable assurance that data will be entered in a timely and accurate manner, and that sensitive data will be safeguarded at all participating circuits. Some measures need to be adopted for routinely monitoring data entry and ensuring quality control.
- **Clear policies and agreements.** Stakeholders’ concerns about MOJJIS will be lessened and support strengthened if there are clear, detailed policies and inter-agency agreements regarding what types of data can be shared and who can access different types of data, and when all users are thoroughly trained on these. For both JIS and MOJJIS, stakeholders need policies regarding how long data will remain in the system and termination of records for juveniles who pass their 17th birthday.
- **Review current training curricula and method of delivery.** Missouri juvenile justice professionals have busy schedules and varied needs for training. It is recommended that OSCA explore ways to make training as flexible and as customized to users’ needs as possible. Further, it is important that the training be offered in a timely way so that new skills

are not lost if there are delays before these can be put to use.

- **Promote automation as an evaluation tools.** Provide training, assistance or other necessary support to allow circuits to conduct evaluation using the data that will be stored in the statewide database. Administrators are interested in learning how the databases can be used to generate aggregate data from their circuit, and function as an aid in evaluating trends and determining “what works.” However, they recognize this will require special training, resources, or direct assistance from OSCA and are unsure whether they will receive the support to do this.

This evaluation focused on the short-term changes automation has produced. By and large, the impact has been positive. Further, stakeholders perceive automation as having potential to make an increasingly stronger positive impact on juvenile justice operations in Missouri over time. As the level and scope of automation expands, more benefits can be realized. Costs, too, will increase as may the potential for unplanned negative consequences. It is critical to continue monitoring the impact and gather data on long-term indicators of success. While it may not be feasible to gather these data across all circuits, some of these changes can be examined on a limited basis at pilot sites as the JIS and MOJJIS components move forward.

Long-term performance indicators include the following: (a) Workload reductions/shifts – Does having tools with which to obtain better information and communicate more expediently produce measurable changes in the amount of time juvenile justice professionals spend on essential case-management tasks and supervising and providing services to youth? (b) Collaborative

relationships – Do juvenile justice personnel and personnel at other youth-serving agencies participate more frequently in case staffings and engage in other forms of case-based collaboration more often? (c) Utility of databases for evaluation purposes– Do circuits increasingly use JIS & MOJJIS aggregate data to make more informed decisions about resource allocation and assignments of services and sanctions? (d) Report quality – Are court reports more uniform, comprehensive and detailed in regard to youth’s background and contact with other service systems? (e) Service delivery – Is there evidence that youth are less likely to receive redundant services?

OSCA should also consider asking circuits to provide anecdotal data of ways in which automation has made a difference in case-management and disposition decisions (for instance, describing cases in which they were able to learn about a youth’s certification history or potential caretakers’ arrest because of the existence of a state-wide database). Such anecdotes cannot replace quantitative data, but they are sometimes more powerful and useful than statistical data in communicating ways in which automation affects juvenile justice in Missouri. These “stories” by front-line juvenile justice professionals can be included in testimony to the legislature and reports to the press, and therefore increase buy-in and garner long-term support.

Conclusion

Automation and integrated information-sharing can ultimately produce a wide range of benefits to juvenile and family courts and other youth-service agencies. Despite the responsibilities with which juvenile justice agencies are charged and their impact on communities, like other public agencies, they have lagged far behind the private sector in technological advances. The integration of

computers, automation, and information-sharing networks into the work of Missouri's juvenile justice system has produced promising results. By continuing to increase efficiency of court operations, strengthening case-management practices, and promoting cross-system collaboration and information-sharing, juvenile justice personnel can make more equitable and sound decisions, thus building public confidence in the courts and juvenile justice system.

APPENDIX A

Interview Protocol

Methods: In-person and telephone interviews

Participants: Juvenile Officers/Deputy Juvenile Officers/Clerical staff at multiple circuits

Overview

1. This evaluation is to identify positive outcomes, challenges, and lessons learned from juvenile court automation overall. What aspects were new to your circuit? (For instance, did they have Internet before? What stage is that circuit at now?)

Implementation & Impact

1. What are the biggest changes that you anticipate automation has brought and will bring to the juvenile offices? Please use specific examples.
2. What problems/challenges do you anticipate? Probe for each of these as potential barriers: a) confidentiality concerns; b) “fear” of technology; c) needs to upgrade as technology changes; d) cost of maintaining system; e) lack of confidence that system will bring meaningful change; f) lack of readily measurable outcomes. These apply to any of the different aspects of automation.
3. How will such problems/challenges be addressed?
4. Have there been disappointments? “Was automation over-promised”?
5. What incentives are there for participating in the implementation? Why did your circuit get involved at the stage it did?

Training and Support

1. How has/will training be/being conducted? Does the training meet the needs of you and your staff? Why or why not?
2. Are there unmet training needs? If so, what?
3. How is technical support provided?
4. Are there ways in which technical support could be strengthened? If so, how?
5. How will you ensure/monitor use of the system [This question is directed at supervisors. Frame question in relation to the different components. For example, do DJOs monitor and respond to their e-mails? How will data entry be accomplished?]
6. In general, how would you say the project is being received by staff at your circuit?

JIS (for the 37th Circuit only)

1. As you understand it, what are the primary goals/objectives in implementing this database statewide?
2. Can you describe some of the specific uses that will result from the database?
3. What immediate benefits do you anticipate? What are the long-term benefits? [If the office has an existing database] How will the transition be made from the existing database to the JIS? What advantages does JIS offer over the old database? Are there disadvantages you see/concerns you have?

Other

1. Did you sit on any of the committees/task teams that planned/developed/oversee this project? Do you have any additional insights you can add as a result of your experience with this group(s)?

APPENDIX B
Juvenile Justice Court Automation Project Data Sources:
Interview Participants

- Stan Smith, Juvenile Officer, 37th Circuit (Telephone interview)
- Katherine Herman, Assistant Court Administer, 22nd Circuit (Telephone interview; In-person interview)
- Kelly Wells, Chief Deputy Juvenile Officer, 37th Circuit
- Marilyn Cockrum, Secretary, 37th Circuit
- Cathy Smith, Juvenile Officer, 3rd Circuit (Telephone interview)
- Ray Grush, Juvenile Officer, 11th Circuit (Telephone interview)
- Julie Cole-Agee, Director, Missouri Juvenile Justice Association (Telephone interview)
- Richard Gerling, Juvenile Court Workflow Coordinator, OSCA
- Bruce McKinnon, Juvenile Officer, 12th Circuit
- Roy Richter, Judge, 12th Circuit (Telephone interview)
- Bob Perry, Court Administrator, 13th Circuit (Telephone interview)
- Dr. Mark Enderle, Superintendent of the Fulton School District (Telephone interview)
- Rick McElfresh, Risk Assessment Specialist, OSCA (Telephone interview)
- Dr. Alan Ensor, Superintendent, Missouri School for the Deaf (Telephone interview)
- Marcia Hazelhorst, Deputy Juvenile Officer Supervisor, 13th Circuit (Telephone interview)
- Rebecca Culler, Chief Juvenile Officer, 27th Circuit (Telephone interview)
- Dave Kierst, Jr., Juvenile Officer/Director of Family Court Services, 16th Circuit (Telephone interview)
- Linda Gramblin, Data Processing Coordinator, Division of Youth Services
- Cindy Wilkinson, Management and Analyst Specialist, Division of Family Services (Member of Missouri Juvenile Justice Information System Task Team)

APPENDIX C

Focus Group Protocol for Juvenile Officers & Deputy Juvenile Officers

Introduction: The purpose of this evaluation is to identify positive outcomes, challenges, and lessons learned from the juvenile court automation project. This includes the SJIN, JIS, infrastructure, automated risk and needs classification system, Internet access, on-line communication system (electronic mail) and the overall Microsoft package. The purpose of this focus group is to discuss your experiences and impressions regarding the impact automation has had and may, in the future, have on your juvenile office and the work you do. Feel free to openly share perceptions, experiences and suggestions in this regard. While your responses, input, and suggestions will be used to inform the evaluation, specific comments made by individuals will be kept confidential.

General:

1. Could each of you briefly explain your role/job with the juvenile office? What do you know about the automation project? What exposure have you had to the different components of the project at your site [What does this site have, what do focus group participants access/use, and for how long]?
2. What did this project bring to your site that is completely new? [For instance, did they have Internet, MicroSoft, e-mail, other databases or was this all provided through OSCA?].

Implementation and Impact:

1. What are the biggest changes that automation has brought and will bring to the juvenile offices? Please provide specific examples in your work.
2. What are the primary benefits that automation has brought? What future benefits do you anticipate? Please provide specific examples in your work.[Probe for examples related to access to computers in general, electronic mail, automated classification system, access to on-line forms.] What suggestions do you have to strengthen the effectiveness of automation and increase positive impact?
3. What problems/challenges have you encountered/do you anticipate might arise? [Probe for each of these as potential challenges: a) system is not user-friendly; b) confidentiality concerns; c) “fear” of technology; d) over-reliance on automation with no backup when system breaks down; e) cost and retraining related to upgrades as technology changes; f) cost of maintaining system; g) lack of confidence that system will bring meaningful change.]
4. How have such problems/challenges been addressed so far? What suggestions do you have to reduce negative impact over time?

JIS (for the 37th Circuit only):

1. Can you explain JIS, as you understand it, and what you understand are the primary goals/objectives in implementing this database statewide?
2. Can you describe some of the specific uses of the database (or that you anticipate will result)?
3. What immediate benefits do you see/anticipate? What are the long-term benefits? What suggestions do you have that might improve JIS and maximize positive impact?
4. What disadvantages/drawbacks do you see? How might these be addressed? What suggestions do you have to minimize negative impact?

Training and Support :

1. How has/is training been/being conducted? Has it met your needs? For supervisors, has it met your staff's needs? Why or why not? How do you obtain training you need [or obtain it for your staff]?
2. Are there unmet training needs? If so, what?
3. How is technical support provided? Has it met your needs?
4. Are there ways in which technical support could be improved? If so, how?

Other:

1. Any final comments/remarks/suggestions?

APPENDIX D
Juvenile Justice Court Automation Project Evaluation Survey

*Please place an **X** next to the choice that best fits your response.*

1. My current position is:
☐ Juvenile Officer
☐ Deputy Juvenile Officer – Delinquency
☐ Deputy Juvenile Officer – Abuse & Neglect
☐ Detention Staff
☐ Clerical
☐ Other (specify) _____
2. ☐ Circuit Number
3. How long have you had access to a personal computer and workstation?
☐ years ☐ months
4. The computer/workstation I generally use is:
☐ On my desk
☐ At another location in our juvenile office
☐ Other arrangement (explain) _____
5. What types of computer training have you received in your job?
(Check as many as are appropriate. If you are scheduled to receive training in the near future, indicate this)
☐ General use of personal computer
☐ J-TRAC
☐ Juvenile Information System (JIS)
☐ Lotus Notes
☐ General electronic mail use
☐ Internet use
☐ MicroSoft Word
☐ MicroSoft Excel
☐ iNotes
☐ Other (briefly describe) : _____
☐ Scheduled to receive: _____
6. Was the training convenient for you?
☐ Yes, both time and place were
☐ Time was; place was not
☐ Place was; time was not
7. Did the training meet your needs?
☐ Yes ☐ No (please explain why not) _____

8. Please indicate the extent to which you agree or disagree with the following statements?

Access to electronic mail ("e-mail") communication:

a. Permits quicker access to needed information about juveniles with whom you work

Strongly agree ____ Agree ____ Disagree ____ Strongly disagree ____

b. Facilitates intra-circuit communication (within your juvenile office and with other satellite offices in your circuit)

Strongly agree ____ Agree ____ Disagree ____ Strongly disagree ____

c. Facilitates communication with other circuits

Strongly agree ____ Agree ____ Disagree ____ Strongly disagree ____

d. Facilitates inter-agency communication (with other agencies, including Division of Family Services, schools, Department of Mental Health, treatment/placement facilities, or other services for youth)

Strongly agree ____ Agree ____ Disagree ____ Strongly disagree ____

9. How frequently do you use the following?

	Intra-agency e-mail⁸	Inter-agency e-mail	Internet	On-line forms
At least 2-3 times weekly	_____	_____	_____	_____
Weekly	_____	_____	_____	_____
Less than once a week	_____	_____	_____	_____
Rarely	_____	_____	_____	_____
Do not use at all	_____	_____	_____	_____

10. How often do you use e-mail to communicate with the following?

	DFS	Mo. juvenile offices	Schools	Placement facilities	Division of Mental Health
At least 2-3 times weekly	_____	_____	_____	_____	_____
Weekly	_____	_____	_____	_____	_____
Less than once a week	_____	_____	_____	_____	_____
Rarely	_____	_____	_____	_____	_____
Do not use at all	_____	_____	_____	_____	_____

11. Please describe your use of the following databases?

	MCIC	JO Discussion database	Missouri Court Opinion database
Routinely use	_____	_____	_____
Occasionally use	_____	_____	_____
Can access/ but don't use	_____	_____	_____
Don't know about/ can't access	_____	_____	_____

⁸ Intra-agency use refers to communication with juvenile office staff within your own circuit. Inter-agency refers to contact with other juvenile officers, Division of Family Services, schools, or other outside agencies and organizations.

12. Which other databases do you use?

____ Routinely (list) _____
____ Occasionally (list) _____

13. What resources do you rely on when you encounter automation-related problems/when your computer is not operating properly?

____ OSCA help desk
____ Written training materials provided by OSCA
____ Staff at your office
____ Other (specify) _____

14. How long has your office had access to J-TRAC?

____ Years (approximately)

Answer questions #15-17 only if you are from the following circuits, the 10th, 11th, 12th, 14th, 19th, 20th, 22nd, 41st, or 45th, which have J-TRAC. All others, please skip to Question #16.

15. How user-friendly would you rate J-TRAC?

____ Very user-friendly
____ Moderately user-friendly
____ Moderately difficult to use
____ Very difficult to use

16. Have you encountered any persistent problems in using J-TRAC?

____ Yes ____ No

If so, please describe:

17. What are the primary advantages you see with J-TRAC?

____ Facilitates more uniform decision-making
____ Minimizes errors in risk & needs assessment and classification (resulting in fewer errors than using the risk and needs tool without automation would)
____ Creates aggregate data reports that can assist in resource allocation and planning
____ Helps ensure that risk and needs assessments are completed in timely manner
____ Other (Please describe)

18. Have you used the Internet for the following purposes?

____ To research juvenile justice issues, such as legislative changes, that affect my work with youth
____ To research grants or funding opportunities for new programs or services
____ To learn about best practices that are used with juveniles and their families
____ To find community services, programs and/or placement facilities for my clients
____ Other (briefly describe)

19. How useful is it in your job to have access to and electronic transmittal capabilities for the standardized form/templates that you have on-line? (such as Form JVO17 - Order to Take Juvenile Into Judicial Custody; JVM10 -Voluntary Dismissal)

- ☐ Very useful
- ☐ Somewhat useful
- ☐ Not useful at all

20. What benefits do you see to having e-mail communication capabilities?

What drawbacks do you see?

21. What benefits do you see to having access to the Internet?

What drawbacks do you see?

22. What benefits do you anticipate might result from an automated state-wide database that provides a juvenile case management system and that can interface with the adult court's case management system?

- ☐ Access to more complete and accurate referral history
- ☐ Improved case decision-making (as a result of having better information)
- ☐ Improved case management
- ☐ Access to information on parents' court involvement
- ☐ More uniform decision-making in regard to sanctions and services provided
- ☐ More timely access to case information
- ☐ Less paperwork/paper waste
- ☐ Improved public safety

23. What drawbacks might there be to an automated state-wide database that provides a juvenile case management system and that can interface with the adult court's case management system?

- ☐ Time spent in learning new system
- ☐ Over-dependence on automated recordkeeping
- ☐ System breakdowns slowing work
- ☐ Loss of data in legacy databases (existing databases your juvenile office currently uses)
- ☐ Difficulty in transitioning from legacy databases

24. Do you have concerns about any of the following?

- ☐ Security of information sent electronically
- ☐ Security of information stored electronically (for instance, in databases)
- ☐ Level of difficulty in learning and using computers, new databases, and/or software
- ☐ Understanding of what information can and cannot be shared with other agencies
- ☐ System breakdowns slowing work
- ☐ Over-dependence on automated recordkeeping without sufficient paper back-up system
- ☐ Reduced reliance on personal contacts in the field
- ☐ Abuse of e-mail/Internet (e.g. used for personal reasons)
- ☐ Other (describe)

25. Can you describe ways in which automation has resulted in cost-savings to your office?

Can you describe ways in which automation has resulted in increased costs to your office?

26. Overall, since automation⁹ has been introduced at your circuit, which of the following would best describe the impact it has had on your job? (Check more than one if applicable.)

- ☐ Significantly positive
- ☐ Moderately positive
- ☐ Neutral; no noticeable impact
- ☐ Moderately negative
- ☐ Significantly negative

27. Please feel free to provide other comments regarding your experiences with juvenile court automation and suggestions that you think can enhance the impact of automation on juvenile justice in Missouri:

⁹ Automation includes having access to a computer workstation, the Microsoft package (including MS Word, Excel, etc), J-TRAC, Lotus Notes, e-mail, iNotes, Internet access, juvenile justice databases, and/or JIS.

APPENDIX E

Full Results of Survey

Note: Percentages may not equal 100% due to rounding and subjects not responding to every item.

Overall impact of automation

Significantly positive	57%
Moderately positive	20%
Neutral; no noticeable impact	6%
Moderately negative	0
Significantly negative	0

Respondents by job title

Juvenile Officer	17%
Deputy Juvenile Officer	39%
Detention Staff	2%
Clerical	13%
Other	25%

Circuits responding: 89% (all but these 5 circuits responded: 13th, 17th, 25th, 40th, and 43rd)

Mean years access to office personal computer: 4.7 years

Location of computer/workstation respondent accesses

On my desk	90%
At another location in our juvenile office	1%

Training received

General use of personal computer	44%
J-TRAC	27%
Juvenile Information System (JIS)	29%
Lotus Notes	66%
General electronic mail use	26%
MicroSoft Word	16%
MicroSoft Excel	50%

Rating of convenience of training

Convenient time and place	72%
Time was; place was not	8%
Place was; time was not	1%

Training met users' needs

Yes	75%
No	8%%

Access to e-mail

	Strongly Agree	Agree	Disagree	Strongly Disagree
Permits quicker access to needed information about juveniles with whom I work	59%	16%	0	2%
Facilitates intra-circuit communication	63%	32%	0	1%
Facilitates communication with other circuits	52%	31%	3%	0
Facilitates inter-agency communication (DFS, DMH, other)	41%	37%	9%	5%

Frequency of use of various applications

Application	2-3 times	Weekly	Less than once a week	Rarely	Not at all
Intra-agency e-mail	73%	10%	6%	1%	0
Inter-agency e-mail	50%	14%	6%	5%	1%
Internet	40%	18%	10%	4%	19%
On-line forms	35%	14%	8%	12%	20%

Frequency of e-mail contact with other agencies/organizations

CONTACT	2-3 times	Weekly	Less than once a week	Rarely	Not at all
Other Mo. Juvenile offices	26%	14%	21%	20%	11%
Division of Family Services	23%	13%	10%	21%	5%
Schools	3%	9%	10%	24%	43%
Placement facilities	1%	4%	14%	23%	50%
Department of Mental Health	1%	2%	7%	24%	6%

Frequency of database use

	MCIC	JO Discussion	Missouri Court Opinion
Routinely use	9%	6%	11%
Occasionally use	14%	7%	23%
Can access but don't use	19%	30%	19%
Don't know about/can't access	20%	38%	23%

(Note: these percentages are based on all respondents. Most are not Juvenile Officers, and therefore, not likely to use the JO Discussion database. As stated in the body of the report, 37% of those JOs who completed the survey said they “Routinely use” the Discussion database.

Help resources used

OSCA help desk	69%
Written training materials provided by OSCA	56%
Staff at your office	13%

Ratings of J-TRAC

Very user-friendly	17%
Moderately user-friendly	58%
Moderately difficult to use	20%
Very difficult to use	3%

Percent of users experiencing persistent problems using J-TRAC

Yes	40%
No	60%

Primary advantages of J-TRAC

Facilitates more uniform decision-making	50%
Minimizes errors in risk & needs assessment and classification	41%
Creates aggregate data reports that can assist in resource allocation and planning	50%
Helps ensure that risk and needs assessments are completed in timely manner	7%

Uses of Internet

To research juvenile justice issues, such as legislative changes, that affect my work with youth	8%
To research grants or funding opportunities for new programs or services	57%
To learn about best practices that are used with juveniles and their families	43%
To find community services, programs and/or placement facilities for my clients	37%

Usefulness of on-line access to standardized forms

Very useful	45%
Somewhat useful	18%
Not useful at all	14%

Anticipated benefits of statewide juvenile justice database

Access to more complete and accurate referral history	83%
Improved case decision-making	71%
Improved case management	65%
Access to information on parents' court involvement	74%
More uniform decision-making in regard to sanctions and services provided	49%
More timely access to case information	72%
Less paperwork/paper waste	49%
Improved public safety	40%

Perceived drawbacks of statewide juvenile justice database

Time spent in learning new system	17%
Over-dependence on automated recordkeeping	29%
System breakdowns slowing work	54%
Loss of data in legacy databases (that your office currently uses)	31%
Difficulty in transitioning from legacy databases	23%

Users' concerns

Security of information sent electronically	29%
Security of information stored electronically (for instance, in databases)	28%
Level of difficulty in learning and using computers, new databases, and/or software	16%
Understanding of what information can and cannot be shared with other agencies	25%
System breakdowns slowing work	50%
Over-dependence on automated recordkeeping without sufficient paper back-up system	27%
Reduced reliance on personal contacts in the field	21%
Abuse of e-mail/Internet (e.g. used for personal reasons)	16%